AMENDMENTS TO THE CLAIMS

1. (Currently Amended) An image processing method of eliminating a ~~second~~ line-shaped image object, which overlaps with a ~~first~~ moving image object in one image comprising effective or ineffective pixels, from the ~~first~~ moving image object, the method comprising the respective steps of:

a line segment extraction step for extracting a line segment from ~~the second~~ a line-shaped image object by a line segment extraction means;

an elimination step for eliminating the ~~second~~ line-shaped image object from the ~~first~~ moving image object by a line-shaped image elimination means;

a pixel extraction step for scanning a vicinity region of the line segment on the ~~first~~ moving image object and sequentially extracting pixels to be scanned by an image scan means;

an effective pixel determination step for determining whether or not the extracted pixels to be scanned are the effective pixels by an effective pixel determination means; and

a pixel interpolation step for dropping a perpendicular from the pixels to be scanned that are determined to be the effective pixels at the effective pixel determination step to a nearest line segment and setting all the pixels on the perpendicular as the effective pixels by a pixel interpolation means.

2. (Currently Amended) An image processing method according to claim 1, wherein the image is one frame in ~~a moving~~ the moving image object comprising a plurality of

frames.

3. (Currently Amended) An image processing method according to claim 1, wherein the image is an image obtained by subjecting a single frame or plural frames in the moving image object comprising the plurality of frames to predetermined arithmetic processing.

4. (Currently Amended) An image processing method according to claim 3, wherein the arithmetic processing is any one of processing for determining a difference between two arbitrary frames in the moving image object or processing for determining a change region in one arbitrary frame in the moving image object.

5. (Currently Amended) An image processing method according to claim 4, wherein the processing for determining the change region in the one arbitrary frame in the moving image object is processing for extracting predetermined frames before and after the one frame and obtaining ~~difference~~ different images between each predetermined frame and the one frame, respectively as well as executing an ANDing operation of both of the ~~difference~~ different images.

6. (Currently Amended) An image processing method according to ~~claims 1 to 5~~ claim 1, wherein a line segment is extracted using ~~the Hough~~ a Hough transform at the line segment extraction step.

7. (Currently Amended) An image processing apparatus for eliminating a ~~second~~ line-shaped image object, which overlaps with a ~~first~~ moving image object in a single image comprising effective or ineffective pixels, from the ~~first~~ moving image object, the apparatus comprising:

a line segment extraction means for extracting a line segment from the ~~second~~ line-shaped image object;

a line-shaped image elimination means for eliminating the ~~second~~ line-shaped image object from the ~~first~~ moving image object;

an image scan means for scanning a vicinity region of the line segment on the ~~first~~ moving image object and sequentially extracting pixels to be scanned;

an effective pixel determination means for determining whether or not the extracted pixels to be scanned are the effective pixels; and

a pixel interpolation means for dropping a perpendicular from the pixels to be scanned that are determined to be the effective pixels at the effective pixel determination step to a nearest line segment and setting all the pixels on the perpendicular as the effective pixels.

8. (Currently Amended) An image processing apparatus according to claim 7 comprises a frame extraction means for extracting one frame from ~~a moving~~ the moving image object comprising a plurality of frame and uses one frame extracted by the frame

extraction means as an image.

9. (Currently Amended) An image processing apparatus according to claim 7 comprises a frame extraction means for extracting a single frame or a plurality of frames from ~~a moving~~ the moving image object comprising a plurality of frames and a frame arithmetic processing means for subjecting an extracted frame to predetermined arithmetic processing and uses a result of the arithmetic processing as the image.

10. (Currently Amended) A image processing apparatus according to claim 9, wherein the frame arithmetic processing means executes any processing of processing for determining a difference between two arbitrary frames in the moving image object and processing for determining a change region in one arbitrary frame in the moving image object.

11. (Currently Amended) An image processing apparatus according to claim 10, wherein, the processing executed by the frame arithmetic processing means to determine the change region in the one arbitrary frame is processing for extracting predetermined frames before and after the one frame and obtaining ~~difference~~ different images between each predetermined frame and the one frame, respectively as well as executing an ANDing operation of both of the ~~difference~~ different images.

12. (Currently Amended) An image processing apparatus according to ~~claims 7 to 11~~ claim 7, wherein the line segment extraction means extracts a line segment using ~~the Hough~~ a Hough transform.

13. (New) The image processing method according to claim 1 or 5, wherein the line-shaped image object and the moving image object are ORed with each other and made into a binary image of color clusters corresponding to colors of the moving image object that have been previously prepared,

wherein the effective pixels are the pixels of an image I(t) at time t = t that are included in the previously prepared color clusters corresponding to colors of the moving image object.

14. (New) The image processing method according to claim 7 or 11, wherein the line-shaped image object and the moving image object are ORed with each other and made into a binary image of color clusters corresponding to colors of the moving image object that have been previously prepared,

wherein the effective pixels are the pixels of an image I(t) at time t = t that are included in the previously prepared color clusters corresponding to colors of the moving image object.